

**Request for Proposals
Home Inspection Services
For Single Family and Multi-Family Properties**

The Mobile County Commission is soliciting the professional services of a qualified home inspector (individual or firms) to perform housing inspections of single-family and multi-family properties. This service will be paid by funds provided by the U.S. Department of Housing and Urban Development and/or other funds as may require these services.

Background:

Mobile County uses various federal funds to carry out programs that require housing inspection services. Not all programs are funded annually; however, there is a potential that any and all programs will be on-going in a given program year. The down payment assistance program provides assistance to families to purchase existing homes. There are also programs that provide funding for the construction, rehabilitation, or emergency repair of single-family homes or construction of multi-family rental units. Home inspection services will be required for each of these programs. Services for other housing programs may also be required as funds become available or as new programs develop.

Home purchases utilizing down payment assistance are typically located on scattered sites throughout the County. Construction of one or more single-family homes is typically conducted at a single congregate site. Emergency repair assistance or rehabilitation of single-family homes is typically carried out on scattered sites throughout the County. Multiple units in a multi-family development are located at a single site with multi-family developments located throughout the County.

The following is an estimate and is subject to change. Down payment assistance averages 10 homes per year. Construction of single-family homes varies from one (1) to four (4) units per year. Emergency repair and/or rehabilitation of single-family homes averages five (5) units per year. Construction of multi-family rental units averages 20 units per year.

Note: The 2013 HOME Final Rule included significant changes to the property standards contained with 24 CFR 92.251. The changes generally replace references to the HUD Housing Quality Standards (HQS) found at 24 CFR 982.401 with cross-references to HUD's Uniform Physical Condition Standards (UPCS) found at 24 CFR 5.705. Implementation of this change has been delayed pending issuance of further guidance by HUD about which specific UPCS will apply to single-family vs. multi-family housing. However, HUD has indicated that inspectors working on HOME-funded projects are not be required to be UPCS certified by the Real Estate Assessment Center (REAC).

Scope of Service:

Responsibilities include, but are not limited to:

The individual or firms selected will perform any and all tasks relevant to conducting physical inspections of the home unit, site, building systems, building exteriors, and common areas in accordance with all appropriate standards under local, state and federal law. Homes are to be inspected for compliance with the appropriate local codes adopted by Mobile County (see Exhibit A), UPCS and/or HQS (see note in Background section above), and at minimum perform visual lead-based paint inspections. Inspections should be completed within one week of notification. Reports should be submitted within one week of inspection to the County in writing and include digital photographs, when applicable.

1. For the Down Payment Assistance program, the services required will include initial inspections of existing homes; assessments for defective paint according to the Lead Safe Housing Rule (24 CFR 35); write-up for repairs needed (if any); and follow-up inspections (if required) to verify that the repairs have been completed.
2. For Construction of Single Family Homes, the services required may include a cost analysis of proposed construction estimates. The services required will include periodic inspections (progress or final) to i) verify that construction is in accordance to the drawings and specifications and/or ii) to verify validity of items on pay request prior to payment of Developers/Contractors. If any deficiencies are identified, a punch list will be provided to the Developer/Contractor and a follow-up inspection will be required. Annual inspections (following completion of construction) may also be required to verify property standards.
3. For Emergency Repair Assistance/Rehabilitation of Single Family Homes, the services required will include feasibility analysis for proposed repair/rehabilitation, development of a scope of work with detailed cost estimate, cost analysis of work write-up and proposed cost estimate prepared by Developer/Contractor and/or periodic inspections (progress or final) prior to payment of pay requests from Developers/Contractors to verify validity of items on pay request and the work write-up. If any deficiencies are identified, a punch list will be provided to the Developer/Contractor and a follow-up inspection will be required.
4. For Construction of Multi-Family units, the individual or firms selected will perform any and all tasks relevant to conducting physical inspections of the homes, site, building systems, building exteriors, and common areas in accordance with all appropriate standards under local, state and federal law. Services required include periodic inspections prior to draw/progress payment requests from Developers/Contractors to verify validity of items on pay request. Annual inspections (following completion of construction) will also be required to verify property standards.
5. The individual or firm selected will be responsible for scheduling all inspections.
6. The individual or firm selected upon request of the County, shall attend any required meetings connected with the plan review, draw request, or field inspection of the projects.

Proposal and Submission Requirements:

Responses to this Request for Proposals (RFP) shall be submitted in PDF format to ben.kim@mobilecountyal.gov no later than 12:00 noon Central Standard Time on Monday, May 15, 2023.

Each proposal shall be prepared simply and economically, providing a straightforward, concise description of the responder's capabilities to satisfy the requirements of this RFP. Emphasis should be on completeness and clarity of content. If a responder so wishes, the proposal may be accompanied with brochures, promotional materials, or displays properly identified.

All requests for further information must be in writing and emailed to Ben Kim at ben.kim@mobilecountyal.gov.

Proposal Format:

All interested parties must include in their proposals proof of enrollment in SAM.gov and participation in E-Verify in addition to the following:

1. Title Page - Show the RFP subject, the name of your firm, address, telephone number, name of contact person, email address, and date.
2. The proposal shall include a proposal transmittal letter signed by a representative authorized to contractually bind their firm to the proposal.
3. Describe the responder's experience in the provision of services described herein and the number of years engaged in this type of work. Provide a representative list of current and prior clients, including a contact person's name and telephone number, for whom such services have been provided.
4. Litigation - State whether the responder has been involved in litigation within the last five years or if there is any pending litigation in any way arising out of the performance or delivery of services similar to those described herein. If so, provide a brief explanation of the issues involved and the outcome, if resolved.
5. Scope of Service - Please restate each requirement and discuss whether or not the responder can provide the described services, how the requirement will be met or the extent to which responder can meet the requirement.
6. Availability - Provide a statement that responder is ready, willing and able to provide the services in accordance with this RFP and in accordance with respondent's proposal if selected beginning June 1, 2023.
7. Fees - Provide detailed proposed fee structure in accordance to the RFP.

Evaluation Criteria:

All proposals will be evaluated in accordance with the evaluation criteria shown below.

The County reserves the right to reject any and all proposals and to waive any irregularities or informalities in the proposal process. Mobile County Commission is an equal opportunity employer.

- a. A brief resume of their qualifications and a sample of a recent Home Inspection Report. **25 points**
- b. Evidence that the inspector has experience in inspecting multi-family and single family housing, experience in inspecting projects on behalf of local units of government involved in affordable housing programs, experience and working knowledge of UPCS and HQS (see note in Background section above), and experience conducting quality control inspections, knowledge of all applicable current residential and building codes, qualified to, at a minimum, perform visual assessments for defective paint according to the Lead Safe Housing Rule. Please provide copies of current license from the Alabama Department of Finance, Division of Construction Management, the County Business license and a Certificate of Insurance. **50 points**
- c. Proposed fees for services, a description of the services to be delivered for that fee and a schedule of other related charges as described in the RFP. **15 points**
- d. Ability to begin work on June 1, 2023. **10 points**

Other Considerations:

1. Proposals submitted after the time and date specified in this RFP will not be considered.
2. The County reserves the right to select the proposal most responsive to the County's needs. Price will be considered, but will not be the sole determining factor. The County further reserves the right to award a contract from any of the proposals submitted, to reject any and all proposals, and to waive any informalities in the proposals received.
3. All materials submitted in response to this RFP become the property of the County and will be returned only at the option of the County. The County reserves the right to use any or all ideas presented in any response to the RFP, and selection or rejection of the proposal does not affect this right.
4. After the initial review of proposals, the County may invite representatives of firms responding to this RFP to discuss the proposal with key personnel who would be engaged in the provision of services. Such interviews will be conducted for fact finding and explanation purposes and will not include negotiation. The County will not be liable for expenses incurred in attending any such interview.
5. The County will conduct contract negotiations with the firm whose proposal is deemed most responsive to the County's needs. Until the County acts formally to approve a contract, and until such contract is signed by both parties, the County is legally obligated in no respect.
6. In the event the County does not find any proposals submitted in response to this RFP acceptable, it may reject all proposals and at its discretion re-open the proposal process and invite additional entities to submit proposals.
7. The successful responder must maintain all licenses, permits, and other authorizations necessary to provide the needed services as required by federal, state, or local laws.
8. A Certificate of Insurance evidencing the minimum requirements set out in Exhibit B must be provided to and accepted by the County prior to commencement of any work.
9. The successful responder will be required to indemnify, defend and hold the County, its officers and employees harmless from and against all losses, claims, suits or judgments, including payment of attorneys' fees and costs, incurred or asserted against the County as a result of or arising from the firm's negligent acts or omissions. This provision of a contract resulting from this RFP will survive the expiration or termination of the contract.

Term:

Any contract resulting from this RFP will be for a one (1) year term, renewable annually for a total of up to three (3) years, at the option of the County.

Spanish translation and/or clarification will be provided upon request. Please email ben.kim@mobilecountyal.gov. La traducción y/o la clarificación Española serán dados si hay solicitud. Llame por favor (251) 574-5058.

THE MOBILE COUNTY COMMISSION DOES NOT DISCRIMINATE ON THE BASIS OF RACE, COLOR, NATIONAL OR ETHNIC ORIGIN, AGE, RELIGION, DISABILITY, SEX, SEXUAL ORIENTATION, GENDER IDENTITY AND EXPRESSION, VETERAN STATUS, CHARACTERISTICS OF PERSONAL IDENTITY, OR ANY OTHER CHARACTERISTIC PROTECTED UNDER APPLICABLE FEDERAL OR STATE LAW AND IS AN EQUAL OPPORTUNITY EMPLOYER.

EXHIBIT A
Mobile County Building Code
Adoption and Amendments
Effective 5:00p.m., December 31, 2019

Part A - Adopted Codes

2018 International Building Code (IBC)
2018 International Residential Code (IRC)
2018 International Mechanical Code (IMC)
2018 International Plumbing Code (IPC)
2018 International Fuel Gas Code (IFGC)
2018 International Swimming Pool and Spa Code (ISPSC)
2018 International Existing Building Code (IEBC)
2017 National Electric Code (NEC - also known as NFPA 70)
Commercial and Residential Energy Codes shall be the energy codes Adopted
by the Alabama Energy and Residential Codes Board

Part B - Adopted Appendices

2018 International Building Code:
IBC Appendix B - Board of Appeals
IBC Appendix C - Agricultural Buildings
IBC Appendix E - Supplemental Accessibility Requirements
IBC Appendix F - Rodent proofing
IBC Appendix H — Signs

2018 International Residential Code:
IRC Appendix A — Sizing and Capacities of Gas Piping
IRC Appendix B — Gas Appliance Venting
IRC Appendix C — Gas Vent Exit Terminals
IRC Appendix E - Manufactured Housing Used as Dwellings
IRC Appendix G - Piping Standards for Various Locations
IRC Appendix H - Patio Covers
IRC Appendix J - Existing Buildings and Structures
IRC Appendix M - Home Day Care - R-3 Occupancy
IRC Appendix Q - Tiny Houses

2018 International Fuel Gas Code
IFGC Appendix A — Sizing and Capacities of Gas Piping
IFGC Appendix B — Gas Appliance Venting
IFGC Appendix C — Gas Vent Exit Terminals

2018 International Existing Building Code
Appendix C (Guidelines for Wind Retrofit of Existing Buildings)

Part C - Deletions

2018 IBC Chapter 13 - References to Chapter 13 shall be interpreted as references to the Commercial Energy Code.
2018 IRC Chapter 11 - References to Chapter 11 shall be interpreted as references to the Residential Energy Code.
2018 IRC Section R313 (Residential Fire Sprinklers)
2018 IRC Part VII —Plumbing — Residential plumbing shall be regulated by the 2018 IPC as amended
2018 IRC Part VIII —Electrical — Residential electrical shall be regulated by the 2017 NEC
2017 NEC Chapter 8 (Communication System)

Part D - Climatic and Geographic Design Criteria - Table R301.2(1)

Design Criteria shall include ASCE 7-16 ultimate wind speed, Risk Category (I, II, III, or IV) and Exposure Category (B, C, or D)

Risk Category shall not be less than that indicated by IBC Table 1604.5.

One and Two family dwellings shall be not less than Risk Category II.

Structures that exceed 1000 square feet under roof shall not be less than Risk Category II.

Design Wind Speed: Refer to ASCE 7-16 Chapter 26 or the interactive Wind Speed map at

<http://Hazards.atcouncil.org/>

or use the following minimum design wind speeds:

Risk Category Category I: Ultimate Wind Speed = 148 mph

Risk Category Category II: Ultimate Wind Speed = 160 mph

Risk Category Category III and IV: Ultimate Wind Speed = 174 mph

Topographic Effects: Varies — refer to ASCE 7-16 and use site specific analysis

Seismic Design Category: A

Minimum Depth of Footing: 12 Inches below grade

Weathering Potential: Negligible

Termite Infestation: Very Heavy

Mean Annual Temperature: 67 Degrees Fahrenheit

Air Freezing Index: 50 or less

Winter Design Temperature: 29 Degrees Fahrenheit

Ground Snow Load: 0 psf.

Ice Barrier Underlayment: Not Required

FIRM Date: December 31, 1974

Effective Date of Flood Insurance Rate Map: March 17, 2010 and as revised thereafter

Part E — Administrative Amendments

1. Design Professional Required

Plans for buildings and other structures subject to the International Building Code shall be prepared by an Engineer or Architect licensed by the State of Alabama. Plans for buildings and other structures located in Exposure Category "D" shall be prepared by an Engineer or Architect licensed by the State of Alabama. Life Safety Plans for buildings which are intended for use as a school, church, auditorium or other assembly occupancy of people shall be prepared by an Architect licensed by the State of Alabama. Plans for one and two family dwellings shall be prepared by an Engineer or Architect licensed by the State of Alabama except for those buildings designed in accordance with the 2018 Wood Frame Construction Manual.

2. Permit Required

IRC Section R105.1 and IBC Section 105.1 are amended to add:

"The property owner, installer, and contractor are mutually responsible for obtaining a building permit. Each has the duty to verify that a valid permit exists for the proposed work. To the extent permitted by State law and to the extent that the Building Official deems the property owner competent, the property owner may apply for a permit if they occupy the building where the proposed work will take place or if the property owner is the sole occupant of the lot of record where the proposed work will take place.

The property owner may apply for a permit to install or repair electrical wiring and components in the detached single family residence in which they reside or structures accessory to that residence provided the property owner receives a passing score of 70 or higher on a standard electrical competency test administered by Mobile County Inspections.

The property owner may apply for a permit to install or repair sewer drain and water distribution piping and components in the detached single family residence in which they reside or structures accessory to that residence provided the property owner receives a passing score of 70 or higher on a standard plumbing competency test administered by Mobile County Inspections. Property owners may not apply for permits to connect to public sewer.

The property owner may apply for a permit to install or repair Heating and Cooling systems and related duct work in the detached single family residence in which they reside or structures accessory to that residence provided the property owner receives a passing score of 70 or higher on a standard Heating and Cooling installation competency test administered by Mobile County Inspections.

Permit applicants other than the owner shall possess a valid County Business License and Contractor's License in accordance with State Law.

Any person/persons who undertake(s) the repair/improvement of a residential structure where the cumulative total of the repairs/improvements from all trades exceeds \$10,000.00 shall be licensed by the Homebuilders Licensure Board of the State of Alabama.

A contractor who undertakes the repair or replacement of roof covering on a residential structure where the total cost of the repair/replacement meets or exceeds \$ 2,500.00 shall be licensed by the State of Alabama Homebuilders Licensure Board.

Exception: A property owner may make repairs/improvements to a residential structure used as his/her primary residence, or any other structure owned by him/her, provided that the structure is not offered for sale for a period of 1 year from completion of the repairs/improvements.

Code of Alabama Chapter 14A

Any contractor licensed by the Alabama Onsite Wastewater Board may apply for a permit to connect the onsite sewer system to the building drain at a point 3' or greater from the exterior of the building.

3. Work Exempt from Permit

IRC Section R105.2 and IBC Section 105.2, Building Exception 1 is deleted and replaced by the following exception: "1. One story detached accessory structures that meet all of the following conditions:

- a. Are Risk Category I storage shed or playhouse; and
- b. Do not exceed 200 square feet under roof; and
- c. Do not contain a conditioned space; and
- d. Are not served by electric, water, or fuel gas, including solar, wind, or other alternative energy sources; and
- e. Are not located in a Special Flood Hazard Area regulated by the Mobile County Flood Damage Prevention Ordinance; and
- f. Are not located in Exposure Category "D" according to ASCE 7-16, Section 26.7.3"

IRC Section R105.2 Exception 5 is deleted and replaced by the following exception: "5. Portions of sidewalks and driveways located on private property serving one and two family dwellings."

IBC Section 105.2 Exception 6 is deleted and replaced by the following exception: "6. Portions of sidewalks and driveways located on private property which are not more than 30 inches above adjacent grade and are not above any basement or story below and are not part of an accessible route."

4. Permit Expiration

IRC Section R105.5 and IBC Section 105.5 are replaced with: "Every permit issued shall become invalid after one year. The Building Official is authorized to approve re-permitting for up to an additional year from the expiration date. Re-permitting is subject to an on-site investigation to verify compliance with the expiring permit. Re-permitting is subject to the Mobile County Inspection Services Fee Schedule."

5. Flood Hazard Areas

IRC R322.1 and IBC 1612.1 are amended to add: "Any more stringent or restrictive codes, requirements, provisions or ordinances adopted by Mobile County shall prevail over this code." IBC 1612.3 is amended to state Jurisdiction is Unincorporated Mobile County, Alabama; FIRM Effective date is March 17, 2010 and as revised thereafter.

6. Utility Service

Electrical and water service shall not be approved unless:

- a. Existing structure(s) and occupancy are compliant with this code; and
- b. Existing structure(s) and occupancy are compliant with the Mobile County Flood Damage Prevention Ordinance; and

- c. Mobile County Health Department approval has been obtained for the intended use; and
- d. Buildings being served have been legally permitted, inspected and approved.

**Chapter 1 Scope and Administration of the IRC/IBC shall be amended as follows:
Change Section R111 / Section 112 Service Utilities to read as follows:**

R111.2.1 / (A)112.2.1 Temporary Connection Authorization for the temporary connection shall be valid for 90 days from the date of authorization. Permanent connection shall be authorized upon issuance of a Certificate of Occupancy or Certificate of Completion by the Building Official.

7. Site Plan Required

"Lot" is a tract, plot, or portion of land in a subdivision or other parcel of land intended as a unit separated from other parcels by description, for the purpose, whether immediate or future, of transfer of ownership or for building development.

"Lot of Record" is a Lot which is part of a subdivision, the approved plat of which has been recorded in the Office of the Probate Judge of Mobile County.

IRC Section R106.2 is amended to add: "The permit applicant shall obtain Site Plan approval from the Mobile County Engineer prior to permitting where any combination of more than two dwellings, recreational vehicles, or buildings containing habitable spaces are proposed or exist on a Lot of Record. The site plan shall conform to the Commercial Site Plan Requirements of the Mobile County Engineer, the Mobile County Flood Damage Prevention Ordinance and this Code."

IBC Section 107.2.6 is amended to add: "The permit applicant shall obtain Commercial Site Plan approval from the Mobile County Engineer prior to permitting. The Commercial Site Plan shall account for all construction, grading and other changes to the site since the previous Commercial Site Plan was approved. The site plan shall conform to the Commercial Site Plan Requirements of the Mobile County Engineer, the Mobile County Flood Damage Prevention Ordinance and this Code

8. Sidewalk Accessibility

Sidewalks and other pedestrian facilities that are located in a public right of way shall comply with the Proposed ADA Public Right-of-Way Accessibility Guidelines (PROWAG) (2011) for use in evaluating and remedying barriers to accessibility in public rights-of-way or the accessibility standard adopted by resolution of the Mobile County Commission for facilities within the public right-of-way.

Part F — Building Amendments

1. Above Ceiling Access

IBC 1208.3 is amended to add: "If plumbing or mechanical equipment is installed above ceiling or in attic space, a fixed ladder or industrial grade disappearing stairway shall be provided.

IRC M1305.1.2 is amended to add: "If plumbing or mechanical equipment is installed above ceiling or in attic space, a fixed ladder or disappearing stairway shall be provided.

2. Commercial Kitchen Hoods

Commercial kitchen hoods in one and two family dwellings and all occupancies subject to the IBC shall comply with the IMC, NEC, International Fire Code, and NFPA 96. Plans including exhaust ventilation, electrical and fire protection shall be prepared by design professional(s) and shall be submitted with an application for permit.

Grease Duct Testing: The permit holder shall be responsible to provide the necessary equipment and perform the grease duct leakage test. A smoke test shall be performed to determine that all welded and brazed joints are liquid tight.

3. Aluminum/Vinyl Soffit

Soffits that are to be covered with Aluminum or Vinyl shall first be sheathed with 7/16" OSB, 1/2" plywood, dimensional lumber or approved alternate connected to framing designed to resist ASCE 7-16 components and cladding pressures on adjacent walls. The sheathing may be installed with a continuous vent gap up to 3 inches wide. Other methods, certified and sealed by an Alabama Licensed

Professional Engineer, may be acceptable subject to the prior approval of the Inspection Services Director.

4. Stud Packs

For all wood frame structures:

- a. Exterior corners shall be made with solid full height studs and assembled with minimum 10d nails at 8" on center. Where corner hold downs are attached to stud packs at corners, doors, windows and elsewhere, the studs shall be assembled with a double row of 10d nails at 8" on center.
- b. Exterior wall tees shall be made with at least three (3) full height studs assembled with 10d nails at 8" on center.
- c. Interior wall tees shall be made with at least two (2) full height studs with flatwise blocking with a sum total length of at least 50% of the wall height assembled with 10d nails at 8" on center.

5. Chimney Chases

Wood frame chimney chases shall be balloon framed and structurally connected to roof and ceiling framing. The chimney chase shall be detailed in the approved plans and be designed to resist applicable loads specified in ASCE 7-16.

6. Smoke/Carbon Monoxide Detectors

**Chapter 3: Building Planning shall be amended as follows:
Change Section 314 Smoke Alarms to read as follows:**

8314.2.2 Delete exception 2

Change Section 315 Carbon Monoxide Alarms to read as follows:

R315.2.2 Delete exception 2

R315.5 Delete exception

7. Minimum Skylight Fenestration Not Required

IECC Section C402.4.2, Exception 1 is replaced with the following exception:

"1. Buildings in *Climate Zone 2*."

8. Pre-Fabricated Storage Buildings - This section is applicable to pre-fabricated buildings not regulated by the Alabama Manufactured Housing Commission (AMHC) and not exempt from permit in IRC Section R105.2 or IBC Section 105.2. Pre-fabricated building vendors or installers shall submit engineered plans and obtain a building permit prior to placement of the proposed building on any property which is subject to this building code. Plans shall clearly indicate the ASCE 7-16 Risk Category, design Wind Speed and Exposure Category. Plans shall provide vertical load path to ground through anchors or foundation. Pre-fabricated storage buildings must meet or exceed the following requirements:

- a. Length to width ratio of the building shall not exceed 2:1.
- b. Pre-fabricated storage buildings shall not exceed one story.
- c. Doors and windows shall not be located within 36" of ally corner.
- d. Class "H" shingles are required where asphalt shingles are used.
- e. Roof Underlayment shall be synthetic as required in Part G, S 1.
- f. Roof deck and wall sheathing shall not be less than 7/16" OSB or 1/2" plywood.
- g. Sheathing shall be nailed to rafters and studs with 8d ring shank nails spaced not more than 6" on center
- h. All rafters and studs shall be not less than 2"x 4" spaced no more than 16" on center
- i. Gable ends shall be balloon framed.
- j. Piers shall be set on durable footings no less than 12" below natural grade.
- k. Dry stack block piers shall not exceed 16" above natural ground.
- l. Where Earth anchors are used, they must be attached to each of the solid corner stud packs and placed at no more than 60" on center along all four exterior walls and be angled under the building 25 to 30 degrees from vertical.

Part G — Roofing Amendments

S1 Roof Covering

Roof coverings and their attachment must be rated for the ASCE 7-16 design wind speed for the site location of the Building. Installation method shall be in accordance with this code or the manufacturer's recommendations for high-wind regions, whichever is more stringent.

Roof Underlayment: Reinforced synthetic roof underlayment which has an ICC approval as an alternate to ASTM D226 Type II felt paper shall be required wherever roof underlayment is referenced throughout the IRC and IBC. The synthetic underlayment shall have minimum tear strength of 20 lbs. per ASTM D1970 or ASTM D4533.

Asphalt Shingles: Asphalt shingles shall be ASTM D7158 Class H

Shingle Attachment: Shingles shall be installed using six (6) fasteners or the number of fasteners required by the manufacturer for high-wind fastening, whichever is greater.

Attachment at eaves, rakes, valleys, gable ends, and starter strips:

Shingles and starter strips at all intersections, eaves, valleys, and gable ends shall be fully adhesive back starter strips or set in a minimum 8-inch wide strip of flashing cement. Maximum thickness of flashing cement shall be 1/8 inch. Shingles shall not extend more than 1/4 inch beyond the drip edge.

Metal Panels:

Metal panel roofing systems and their attachment shall provide uplift resistance equal to or greater than the design uplift pressure for the roof based on the site design wind speed and exposure category. Attachment shall be per manufacturer's instructions for high wind regions

Clay and Concrete Roof Tiles:

Clay and concrete roof tile systems and their attachment shall meet the requirements of the site design wind speed and exposure category. Clay and concrete roof tiles shall be installed in accordance with FRSA/ Tile Roofing Institute installation guidelines, "Concrete and Clay Roof Tile Installation Manual Fourth Edition, FRSA/TRI 07320/08-05" for the site design wind speed and exposure category. Mortar set tile or mortar set hip and ridge tiles (Systems Three and Four B, as listed in FRSA/TRI Manual) are not permitted. Hip and ridge boards shall be attached to the roof framing to resist the uplift pressure for the site design wind speed and exposure or in accordance with Table 11 of the FRSA/Manual. Hip and ridge tiles shall be secured to the hip and ridge boards with mechanical fasteners and/or an approved roof tile adhesive. Note: FRSA/ Tile Roofing Institute installation guidelines, "Concrete and Clay Roof Tile Installation Manual Fourth Edition, FRSA/TRI 07320/08-05" are available for purchase from the Tile Roofing Institute or the Florida Roofing, Sheet Metal and Air Conditioning Contractor's Association.

Other roof coverings:

For all other roof coverings including structural insulated roof panels, the designer must provide documentation showing the roof covering and the attachments were designed for the component and cladding wind pressures corresponding to the site design wind speed.

S2 Re-roofing

Re-roofing shall meet the requirements of section S1 (Roof Covering) and Section S3 (Sealed Roof Deck). All existing roof coverings other than adhered roof membranes shall be removed to expose the bare roof deck. Damaged or deteriorated decking must be replaced and fastened in accordance with Section S4. If the existing roof deck is attached with staples, 8d irregular shank nails are to be installed in accordance with Section S4 (Roof Decking Attachment). See section S6 (Attic Ventilation) for roof vent and blocking requirements.

S3 Sealed Roof Deck

A sealed roof deck is required for all new construction and re-roofing by one of the following methods:

1. **"Peel and Stick" Membrane** over the entire roof deck: The entire roof deck shall be covered with a full layer of self-adhering polymer modified bitumen membrane ("peel and stick") meeting ASTM D1970 requirements. In applications where membrane adhesion to OSB is marginal, apply a primer to the OSB panels to ensure the proper attachment of the self-adhering membrane to the sheathing. A bond break, such as a 15-pound ASTM D226, Type I underlayment, is to be installed between the "peel and stick" membrane and asphalt shingles, metal roof panels or other roof

covering that would otherwise adhere to a degree that future re-roofing would be severely complicated;

2. **OR, Tape Plywood Joints:** Install a minimum 4" wide self-adhering polymer modified bitumen flashing ("peel and stick") tape over all the wood roof panel joints, covered by a compliant synthetic underlayment over the entire roof deck. In applications where tape adhesion to OSB is marginal, apply a primer to the OSB panels to ensure the proper attachment of the self-adhering tape to the sheathing;
3. **OR, Closed cell spray foam:** Apply closed cell spray foam sealant or insulation to all joints where water might penetrate the roof deck including along all rafters at roof deck and all roof deck joints;
4. **OR if roof deck is dimensional lumber, Tape Underlayment** seams: Install a compliant synthetic roof underlayment. Attach underlayment using annular ring or deformed shank roofing fasteners with minimum 1 inch diameter caps at 6 inches on center along all laps and at 12" on center in the field or a more stringent fastener schedule if required by the manufacturer for high wind installations. The minimum horizontal overlap between rolls is 2-inches and the minimum overlap at the ends of rolls (vertical) is 6-inches. Seal all underlayment seams with a compatible adhesive or a compatible 4-inch wide tape. Horizontal underlayment seams on steep slope roofs with a 12/12 pitch (45 degrees) or greater do not have to be sealed with adhesive or tape provided the overlap for horizontal seams is at least 18 inches. Vertical underlayment seams should always be sealed.

Sealed Roof Exception: Section S3 Sealed Roof Deck does not apply to buildings that are:

1. Unconditioned Risk Category I Buildings; or
2. Unconditioned Risk Category II Buildings which are S, F, or U Occupancies and are without wood roof decks.

S4 Roof Decking Attachment

Roof decks shall be nailed in accordance with the approved plans but no greater than 6 inches on center along panel edges and 8 inches on center in the field for zone 1 AND no greater than 4 inches on center along panel edges and in the field for zones 2 & 3. Nails shall be 8d (0.113" x 2-3/8") or larger irregular shank (i.e., ring shank or spiral) nails with full round heads. Staples are not permitted for fastening of the roof decking. For definitions of zones 1, 2 and 3, refer to Figure 207(2) Roof Sheathing Nailing Zones in ICC 600-2008.

S5 Attic Ventilation

Roof Ventilation shall be designed for the applicable wind load; ridge and off ridge vents shall be tested in accordance with TAS 100(A) for high wind and be labeled for verification of compliance. All roof ventilation shall be anchored in accordance with the manufacturer's installation instructions for the appropriate wind load. **Roof deck panel edges shall be fully blocked at vents.** Attic power vents shall not be installed in homes originally permitted after May 1, 2014. Gable vents shall be shielded to prevent infiltration of wind driven rain by approved method.

PART H – Recreational Vehicle Amendment

1. General

This amendment regulates the placement of Recreational Vehicles (hereinafter RV's) in areas subject to this Code and the connection of those RV's to utilities. Recreational Vehicle Park (hereinafter RV Park) requirements set forth in this amendment shall apply to new RV Parks, and additions to existing approved RV Parks. These requirements provide minimum standards for sanitation and plumbing installation within RV parks, for the accommodations, use and parking of RV's.

1.1 Definitions

AIR LOCK — a condition in which air is trapped in a drain or drain hose and slows or stops the flow of liquid waste or sewage.

CENTER — of a manufactured home or RV is the longitudinal center-line located midway between the right and left side.

COMBINATION COMPARTMENT — a shower stall with or without a door, which provides for or includes a water closet. It is sized to accommodate one person at a time.

AUTHORITY HAVING JURISDICTION — the agency having jurisdiction over this regulation.

DEPENDENT RV — an RV not equipped with a water closet.

DRAIN HOSE — the approved type hose, flexible and easily detachable, used for connecting the drain outlet to a sewer inlet connection.

DRAIN OUTLET — the lowest end of the RV plumbing drain to which the terminal end of the drain hose is connected.

INDEPENDENT RV — an RV equipped with water closet and a bath or shower.

INLET COUPLING - the terminal end of the water system to which the water service connection is made. It may be a swivel fitting or threaded pipe end.

INTERMEDIATE WASTE HOLDING TANK — an enclosed tank for the temporary retention of water-borne waste (this definition only applies to RV's).

LENGTH — the distance measured from the tip of the hitch to the part farthest to the rear of a manufactured home or RV.

LOT OF RECORD — a Lot which is part of a subdivision, the approved plat of which has been recorded in the Office of the Probate Judge of Mobile County.

PARK SEWER SYSTEM — the entire system of drainage piping used to convey sewage or other wastes from the RV drain outlet connection, at its connection to the RV site, to a public sewer or private sewage disposal system.

PARK WATER SUPPLY SYSTEM — all of the water supply piping within the park, extending from the main public supply or other source of supply including branch service lines to the RV service connection, fixture devices, service building and appurtenances thereto.

RV PARK — a legal lot of record upon which three or more RV's are parked, for the temporary use as living quarters of one or more families.

SERVICE BUILDING — a building housing toilet and bathing facilities for men and women, with or without laundry facilities.

SEWER LATERAL — that portion of the park sewer system extending from the main sewer to an RV site.

RECREATIONAL VEHICLE (RV) — A recreational vehicle is a vehicle which is (a) built on a single chassis; (b) 400 square feet or less when measured at the largest horizontal projections; (c) self-propelled or permanently tow-able by a light-duty truck; and (d) designed primarily as temporary living quarters for recreational, camping, travel or seasonal use, not as a permanent dwelling unit.

RECREATIONAL VEHICLE SANITARY SERVICE STATION — a receptacle connected to the sewer, with a wash down water supply protected from backflow, used for emptying waste holding tanks. And a separate potable water supply for RV's that are not parked at a site.

1.2 Recreational Vehicles Limitations:

- a. Shall not be permanently installed, elevated on piers, attached to permanent structures or enclosed within another structure. All exits from an occupied RV must lead directly to the outdoors.
- b. Shall be detachable from utilities and leveling jacks without specialized tools.
- c. Shall be easily prepared for legal travel on Public Highways without the need for oversize permit or escort vehicle.
- d. Shall not exceed 8.5 feet in width when configured for travel.
- e. Shall have tires, lights, brakes, other safety features as required by Federal Motor Vehicle Safety Standards and a VIN as required by the National Highway Transportation Administration (NHTSA).

2. RV Park Plan Approval: Prior to placing three or more RV's on a Lot of Record the applicant shall obtain Commercial Site Plan approval from the Mobile County Engineer, the Mobile County Health Department, and Mobile County Inspection Services.

3. RV Park Plumbing and Sanitation Systems: The International Plumbing Code, as adopted and amended by Mobile County, shall govern the installation of plumbing systems in RV parks, except where special conditions or construction are specifically defined in this appendix

3.1 Recreational Vehicle Sites

3.1.1 RV's shall not hereafter be parked in any RV park unless there are provided plumbing and sanitation facilities installed and maintained in conformity with these regulations. Every RV shall provide a gastight and watertight connection for sewage disposal, which shall be connected to an underground sewage collection system discharging into a public or private disposal system.

3.2 PLANS AND SPECIFICATIONS

The owner or operator of every RV park, before providing areas of space for the use and accommodation of independent RV's, shall make application for a permit and file two sets of plans and specifications with the Mobile County Inspection Services Department. The plans and specifications shall be in detail as follows:

- a. A scaled plot plan of the park, indicating the proposed location of RV spaces.
- b. Size, location and specification of the park sewer system.
- c. Size, location and specification of water supply lines and their location.
- d. Size, location and layout of service building and RV sanitary service station.
- e. Size, location, specification and layout of the fire protection system.
- f. A scaled layout of typical RV sites.
- g. Applications shall bear the approval of the local enforcement agencies indicating compliance with applicable regulations and ordinances.
- h. The issuance of a permit shall not constitute approval of any violation of the Mobile County Building Code or of any other applicable regulation or ordinance.
- i. An approved set of plans and a copy of the permit shall be kept on the park premises until the final inspection has been made.

3.3 SERVICE BUILDINGS and SANITARY SERVICE STATIONS

3.3.1 Minimum Facilities - Each RV Park shall have at least one service building and one sanitary service station. Where the RV Park consists of no more than ten RV spaces, the service buildings shall have a minimum of one laundry tray; two water closets, one lavatory, one shower or bathtub for women; and, one water closet, one urinal, one lavatory, one shower or bathtub for men. For every twenty additional RV spaces, the service buildings shall have an additional lavatory, one shower or bathtub for each sex, one water closet for each sex. One laundry tray shall be added for each two water closets added.

3.3.2 Accessibility - Facilities in service buildings must be handicap accessible to the extent required by the Mobile County Building Code and other applicable local, State and Federal laws.

3.3.3 Laundry's - Laundry trays and washing machines shall be contained in a room separate from the toilet rooms.

3.4 GENERAL REGULATIONS AND MATERIALS

Unless otherwise provided for herein, all plumbing fixtures, piping, drains, appurtenances and appliances designed and used in park sewer, water supply system, and service connections shall be installed in compliance and conform to the quality and weights of materials required by the International Plumbing Code as adopted and amended by the Mobile County.

3.5 PARK SEWER SYSTEM

3.5.1 The main sewer and sewer laterals shall be installed in a separate trench not less than 5 feet from the park water service or distribution system.

3.5.2 The minimum size of pipe in any RV park sewer system shall be 4 inches.

3.5.3 Each RV shall be considered as a minimum of six fixture units in determining discharge requirements in the design of park sewer and sewage disposal systems.

3.5.4 Minimum grade for sewers shall be so designed that the flow will have a mean velocity of 2 feet per second when the pipe is flowing half full.

3.5.5 The discharge of a park sewer system shall be connected to a public sewer. Where a public sewer is not available, an individual sewage disposal system shall be installed, of a type that is acceptable and approved by the Mobile County Health Department.

3.5.6 Manholes and cleanouts shall be provided as required in IPC, Chapter 7. Manholes and cleanouts shall be accessible and brought to grade.

3.5.7 The main sewer shall be provided with a minimum 4 inch vent, not more than 5 feet downstream from its upper trap. Long mains shall be provided with additional relief vents at intervals of not more than 200 feet thereafter, if the manhole covers are not of the perforated type. These relief vents shall be a minimum of half the diameter of the sewer, and shall be securely supported and extended a minimum of 10 feet above ground.

3.5.8 Branch lines or sewer lateral to individual RVs shall be not less than 4 inch diameter.

3.5.9 Sewer inlets shall be 4 inch diameter and extend above grade 3 to 6 inches. Each inlet shall be provided with a gas-tight seal when connected to an RV, and have a gas-tight seal or plug for use when not in service, and shall be protected from traffic.

3.5.10 Each RV site shall be provided with a house trap. Sewer laterals over 30 feet from the main park drainage sewer shall be individually vented and provided with a cleanout brought to grade.

3.5.11 In order to provide the shortest possible drain connection between the RV outlet and drain inlet, all drain inlets shall terminate with reference to the site location of the RV.

3.5.12. Drain connection shall slope continuously downward and form no traps. All pipe joints and

connections shall be installed and maintained gastight and watertight.

3.5.13 No sewage, wastewater or any other effluent shall be allowed to be deposited on the surface of the ground.

3.5.14 Testing the System - Upon completion and before covering, the park drainage system shall be subjected to a static water test. The water test shall be applied to the drainage system either in its entirety or in sections. If applied to the entire system, all openings in the piping shall be tightly closed, except the highest opening and the system shall be filled with water to point of overflow. If the system is tested in sections, each opening shall be tightly plugged except the highest opening of the section under test and each section shall be filled with water, but no section shall be tested with less than 5 feet head of water. In testing successive sections, at least the upper 5 feet of the next preceding section shall be tested, so that no joint or pipe in the system shall have been submitted to a test of less than a 5 feet head of water. The water shall be kept in the system, or in the portion under test, for at least 15 minutes before inspection starts; the system shall then be tight at all points.

3.6 WATER DISTRIBUTION SYSTEM

3.6.1 General

Every RV site, which is supplied with water, shall be provided with an individual branch service line delivering potable water. The outlet of the branch service line shall terminate on the left side of the site of the RV. All risers shall be securely supported and protected from freezing.

3.6.2 Minimum Size

Water service lines to each RV site shall be sized to provide a minimum of 4 gallons per minute at the point of connection with the RV distribution system.

3.6.3 Backflow and Service Shutoff

3.6.3.1 A backpressure backflow preventer or reduced pressure principle backflow preventer shall be installed on the branch service line to each independent RV at, or near, the RV service connection. Backflow prevention devices shall be of an approved type certified by a recognized testing agency as to compliance and performance outlined herein. Valves shall be designed and maintained to close drip tight at a reduced pressure of not less than 1 or more than 5 psi. Valves must be identified with the manufacturer's name and model number.

3.6.3.2 A separate service shutoff valve shall be installed in each branch service line on the supply side of the backflow prevention device.

3.6.4 Water Service Connection

The service connection shall be not less than $1/2$ inch diameter; no rigid pipe may be used. Flexible metal tubing is permitted. Fittings at either end shall be of a quick disconnect type not requiring any special tools or knowledge to install or remove.

3.7 RV SEWER CONNECTIONS

3.7.1 Responsibility

When it is evident that there exists, or may exist, a violation of these rules, the owner, operator, lessee, person charge of the park or any other person causing a violation shall cause it to be corrected immediately or disconnect the water service connection and RV sewer connection from the respective park branch service line and sewer lateral.

3.7.2 Sewer Connections

RV sewer connections shall be of approved semi-rigid or flexible reinforced hose having smooth interior surfaces of not less than 3 inches inside diameter. Sewer connections shall be equipped with a standard quick disconnect screw or clamp type fitting, not less in size than the outlet. Sewer connections shall be gastight and no longer than necessary to make the connection between the RV outlet and the trap inlet on the site.

3.8 MAINTENANCE

All devices or safeguards required by the Mobile County Building Code shall be maintained in good working order by the owner, operator or lessee of the RV park, or his designated agent.

Part I — International Plumbing Code Amendments

Contractors Criteria and Qualifications.

Plumbing Contractor Responsibilities. Before any person, firm, or corporation shall engage in the plumbing business, he/she shall be qualified as set forth herein, and a license shall be obtained from the County or State as required. Where any plumbing work is being done, a Master or Journeyman Plumber shall at all times be present on the job and in actual control and in charge of the work being done. All

plumbers shall be certified by the state of Alabama and Masters must be duly registered with the State of Alabama. The Code Official may require an Alabama certified Master Plumber or Journeyman Plumber to be present at the time of inspection.

Chapter 1: Scope and Administration of the IPC shall be amended as follows:

101.2 Scope. Delete Exception.

101.2.1 Appendices. The following appendices shall be adopted for design references only.

B-RATES OF RAINFALL FOR VARIOUS CITIES.

D-DEGREE DAYS AND DESIGN TEMPERATURES.

E-SIZING OF WATER PIPING SYSTEMS.

Change Section 106 Permits to read as follows:

106.4 By whom application is made. Application for a permit shall be made by the person or agent to install all or part of any plumbing system. The applicant shall meet all qualifications established by statute, or by rules promulgated, by this code, or by ordinance, or by resolution. The full name and address of the applicant shall be stated in the application. An Alabama Master Plumbing License, or a General Contractors License to do utility work as prescribed by the Alabama Plumbers and Gas Fitters Examining Board in the case of sewer and water lines, and Business License shall be required, except for home-owners personally doing work on the residence they occupy, and Master gas fitters as allowed in 106.4.1.

106.4.1 For the Purposes of Water Heater Installations Only. A state certified Master gas fitter may purchase the permit for water heater installation. Said Master gas fitter must adhere to the same qualifications as plumbers.

106.4.2 Onsite Wastewater. On-site wastewater disposal systems which are represented by drawings signed and sealed by an engineer licensed by the State of Alabama shall not be considered plumbing. Any other onsite system installed by any legal entity holding a current license with the Alabama Onsite Wastewater Board shall be considered plumbing to within 3 to 5 feet of the building or residence.

106.5 Permit issuance. The application, construction documents and other data filed by an applicant for permit shall be reviewed by the Code Official or his designated representative. If the proposed work conforms to the requirements of this code and all laws and ordinances applicable there to, the application has been signed by a licensed master plumber or a general contractor of utilities, the street address of the location is included, and applicable fees have been paid, a permit shall be issued to the applicant. If the application does not conform to the requirements a permit shall not be issued, and the application with reason for refusal shall be returned to the applicant. The Code Official may also refuse to issue permits to any individual who has failed to arrange for necessary inspections, as required by the code, on previous permits.

Change Section 107 Inspection and Testing shall be amended to read as follows:

107.2 Required inspections and testing.

4. Building sewer inspection shall be made after piping is installed, and before any back fill is placed.
5. Water service inspection shall be made after piping, valves, and back flow preventers are installed, and before any back fill is placed.

Chapter 2: Definitions of the IPC shall be amended as follows:

Change Section 202 General Definitions to read as follows:

COMMERCIAL STRUCTURE. All structures other than one or two family dwellings.

FLOOD HAZARD AREA. The area designated as a Special Flood Hazard Area (SFHA) in accordance the Flood Damage Prevention Ordinance adopted by the Mobile County Commission as administered by the Mobile County Flood Plain Administrator.

INDIVIDUAL SEWAGE DISPOSAL SYSTEM. A system for disposal of domestic sewage by means of a

septic tank, cesspool or mechanical treatment, designed for utilization apart from a public sewer. NOTE- this system will be allowed only if public sewer is not available, or if serving a detached single family dwelling and the lot of record is 1 acre or greater in size, and is subject to approval by the Mobile County Health Department.

POTABLE WATER. Water free from impurities present in amounts sufficient to cause disease or harmful physiological effects and conforming to the bacteriological and chemical quality requirements of the Alabama Department of Environmental Management (ADEM) drinking water standards. (A.D.E.M.-Admin code R335-7).

SANITARY SEWER. Beginning three feet from the building, a pipe that carries sewage and excludes storm, surface, or ground water.

Chapter 3 General Regulations of the IPC shall be amended as follows:

Change Section 301 General to read as follows:

301.3 Connections to Drainage System,

Change exception to delete reference to chapter 13 & 14 and read in accordance with Alabama Onsite Rules.

Change Section 305 Protection of pipes and plumbing system components to read as follows:

305.4.1 Sewer depth. Building sewers connecting to a private sewage disposal system shall be sealed at the point of connection in an approved manner. Building sewers using materials less than schedule 40 pressure rated, marked for well casing, or SDR 26, shall have a minimum of 12" of cover, and shall not be used under driveways or parking lots.

Change Section 306 Trenching, Excavation, and Backfill to read as follows:

306.5 Abandoning Septic Tanks All septic tanks and cesspools shall be pumped and filled by the permit holder, when connecting to public sewer except when the septic tank is used in conjunction with a force main sewer connection with prior approval from the Code Official.

Change section 308 Piping Support to read as follows:

308.9 Parallel water distribution systems. Piping bundles for manifold systems shall be supported in accordance with Table 308.5. Support at changes in direction shall be in accordance with the manufacturer's instructions.

Change section 309 Flood Hazard Resistance to read as follows:

309.1 General Plumbing. Systems and equipment in structures erected in flood hazard areas shall be constructed in accordance with the requirements of this section and the current International Building Code as adopted by Mobile County.

Change Section 312 Tests and Inspections to read as follows:

312.2 Drainage and vent water test. A water test shall be applied to the drainage system either in its entirety or in sections. If applied to the entire system, all openings in the piping shall be tightly closed, except the highest opening, and the system shall be filled with water to a point of overflow. If the system is tested in sections, each opening shall be tightly plugged except the highest openings of the section under test, and each section shall be filled with water, but no section shall be tested with less than 5 foot (1524mm) head of water. In testing successive sections, at least the upper 5 feet (1524mm) of the next preceding section shall be tested so that no joint or pipe in the building, except the uppermost 5 feet (1524mm) of the system shall have been submitted to a test of less than a 5 foot (1524mm) head of water. The water shall be kept in the system, or in the portion under test, for at least 15 minutes before inspection starts. The system shall then be tight at all points.

312.6 Gravity sewer test. Gravity sewer tests shall consist of plugging the end of the building sewer at the point of connection with the public sewer, filling the building sewer with water, testing with not less than a 5 foot (1524mm) head of water and maintaining such pressure for 15 minutes.

312.9 Shower liner test. This section will be used for reference only.

312.10 Inspection and testing of backflow prevention assemblies. Delete in entirety.

Section 313 Equipment Efficiencies to read as follows: Delete in entirety.

Change Section 314 Condensate Disposal to read as follows:

314.1 Condensate Disposal. Condensate shall not discharge into a private sewage disposal system.

Chapter 4 of the IPC shall be amended as follows:

Change Section 401 General to read as follows:

401.2.1 Abandoned equipment. All septic tanks and cesspools shall be pumped and filled, by the permit holder, when connecting to an existing public sewer system except when said tank is used in conjunction with a force main sewer with approval of the Code Official.

Change Section 413 Floor Drains to read as follows:

413.3 Floor drains in commercial occupancies shall have a minimum of 3-inch diameter (76 mm) drain outlet.

413.5 Restrooms. In restrooms with urinals, other than residential, floor drains shall be provided. Installation shall be in accordance with chapters 413.1, 413.2, and 413.3, and floors shall be sloped to the drain.

Add 413.5.1 Location of floor drain with regard to urinals. In public and employee restrooms, a floor drain is required to be located within 30 inches of the front lip of a urinal.

413.6 Prohibited location. No floor drain or other plumbing fixture shall be installed in a room containing air handling machinery when such room is used as a plenum. When rooms are used as a plenum, equipment drains shall be conveyed to an indirect waste receptor located outside such rooms or other approved point of disposal.

413.6.1 Floor drains directly connected to the plumbing system shall not be located in elevator pits, freezers, or walk-in coolers.

Change Section 424 Urinals to read as follows:

424.3 Additional requirements. See Section 413.5 for additional requirements involved with use of urinals.

Change Section 420 Manual Food and Beverage Dispensing Equipment to read as follows:

420.2 Waste drains. Waste drains for manual food and beverage dispensing equipment shall discharge to the grease trap.

Chapter 5 of the IPC shall be amended as follows:

Change Section 501 General to read as follows:

501.4 Location. Water heaters and storage tanks shall be located and connected so as to provide ready access for observation, maintenance, servicing and replacement. All tank type water heaters located in attics or any overhead locations shall be accessible by a permanent fixed staircase. A permanently attached ladder may be used when located on a mezzanine in commercial occupancies.

Change Section 502 Installation to read as follows:

502.3 Water heaters installed in attics. Attics containing a water heater shall be provided with a readily accessible opening and unobstructed passageway large enough to allow removal of the water heater. The opening shall be accessed by a permanently fixed staircase as defined in 501.4. The passage way shall not be less than 30 inches (762mm) high and 28 inches (711mm) wide and not more than 20 feet (6096mm) in length when measured along the center line of the passage way from the opening to the water heater. The passage way shall have continuous solid flooring not less than 24 inches (610mm) wide. A level service space at least 30 inches (762mm) deep and 30 inches (762mm) wide shall be present at the front or service side of the water heater. The clear access opening shall be of sufficient dimensions to allow removal and replacement of the water heater, but in no case less than 20 inches by 30 inches (508mm by 762mm).

502.6 Prohibited locations. Gas-fired water heaters shall not be installed in a sleeping room, bathroom or a closet accessed through a sleeping room or bathroom.

Change Section 503 Connections to read as follows:

503.3 Non-metallic pipe. Non-metallic pipe shall not be installed within 6 inches (152mm) of the inlet, outlet, or vent of a water heater.

Change Section 504 Safety Devices to read as follows:

504.2 Vacuum relief valve. Bottom fed water heaters and bottom fed tanks connected to water heaters shall have a vacuum relief valve installed. The vacuum relief valve shall comply with ANZI Z21.22. The cold water piping shall rise above the top of water heater, to the vacuum relief valve before connecting to the tank inlet.

504.7 Required Pan. Where water heaters or hot water storage tanks are installed in locations where leakage will cause damage, the tank or the water heater shall be installed in a pan approved for such use.

504.7.1 Pan size and drain. The pan shall not be less than 1.5 inches (38mm) deep and shall be of sufficient size and shape to receive all dripping or condensate from the tank or water heater. The pan shall be drained by an indirect waste pipe having a minimum diameter of 1 inch (25.4mm). Pan drain shall not discharge into a private sewage disposal system.

Change Section 506 Minimum Capacities to read as follows:

506.1 Residential. Water heaters installed in residential occupancies shall be sized in accordance with TABLE 506 or shall be sized using the manufacturers or U.S. Department of Energy calculations. Each bedroom counts for a minimum of 1 person except for the master bedroom which counts for 2 people.

506.2 Commercial. Water heaters installed in commercial occupancies shall be sized by a registered design professional; all food establishments shall have a 30-gallon minimum or equivalent flow rate.

**Table 506
Minimum Capacities for Water Heaters**

FUEL		GAS	ELECT.	OIL									
NUMBER OF BEDROOMS		1			2			3			5		
1 to 1^{1/2} Baths	Storage(gph)	20	20	30	30	30	30	30	40	30			
	Input	27	2.5	70	36	3.5	70	36	4.5	70			
	Draw(gph)	43	30	89	60	44	89	60	58	89			
	Recovery(gph)	23	10	59	30	14	59	30	18	59			
NUMBER OF BEDROOMS		2			3			4			5		
2 to 2^{1/2} Baths	Storage(gph)	30	40	30	40	40	30	40	50	30	50	50	30
	Input	36	4.5	70	36	5.5	70	38	5.5	70	47	5.5	70
	Draw(gph)	60	58	89	70	72	89	72	72	89	90	88	89
	Recovery(gph)	30	18	59	30	22	59	32	22	59	40	22	59
NUMBER OF BEDROOMS		3			4			5			6		
3 to 3^{1/2} Baths	Storage(gph)	40	50	30	50	66	30	50	66	30	50	80	40
	Input	38	5.5	70	38	5.5	70	47	5.5	70	50	5.5	70
	Draw(gph)	72	72	89	82	88	89	90	88	89	92	102	99
	Recovery(gph)	32	22	59	32	22	59	40	22	59	42	22	59

1gph=1.05 mLis

Note:

1. Storage capacity, input and the recovery requirements indicated in the table are typical and may vary with each individual manufacturer. Any combination of these requirements to produce the 1-hour draw stated shall be satisfactory. Recovery is based on 100°F (37.8°C) water temperature rise. The input rating is in units of one thousand BTUs per hour for gas and oil, and one thousand watts per hour for electric.

Example: For a 3-bedroom, 2 bath residence there are three choices as follows: A 40 gal storage/30gph recovery gas heater; a 40 gal storage/22gph recovery electric heater; or a 30 gal storage/59gph recovery oil heater; or an equivalent combination which will produce at least a 70 gph total draw.

Chapter 6 Water Supply and Distribution of the IPC shall be amended as follows:

Change Section 603 Water Service to read as follows:

603.1.1 Fittings. All service lines with insert fittings having less than $\frac{3}{4}$ inch (19.1mm) inside diameter shall require a minimum of 1inch (25.4mm) pipe to the first manifold or water heater.

603.2 Note Force main or pressurized sewer and the water service pipe shall be horizontally separated by no less than 5' of undisturbed or compacted earth.

603.2.1 Water service near sources of pollution. Potable water services pipes shall be separated from septic tanks, and septic tank disposal fields in accordance with Alabama Department of Public Health (ADPH) rules. See section 605.1 for soil and ground water conditions.

Change Section 604 Design of Building Water Distribution System to read as follows:

604.1.1 Piping below slab. All piping below slab shall be seamless tubing.

604.3 Water distribution system design criteria. The water distribution system shall be designed, and pipe and fitting sizes shall be selected such that under conditions of peak demand, the capacities at the fixture supply pipe outlets shall not be less than shown in Table 604.3. The minimum flow rate and flow pressure provided to the fixtures and appliances not listed in table 604.3 shall be in accordance with manufacturer's installation instructions. All systems utilizing insert type fittings shall be limited to 1 fixture per $\frac{1}{2}$ inch or less supply piping.

604.5 Size of fixture supply. The minimum size of a fixture supply pipe and fittings shall be as shown in Table 604.5. The fixture supply pipe shall not terminate more than 30 inches (762mm) from the point of connection to the fixture. A reduced size flexible water connector installed between the supply pipe and the fixture shall be of an approved type. The supply pipe shall extend to the floor or wall adjacent to the fixture. The minimum size of individual distribution lines and fittings utilized in parallel water distribution systems shall be as shown in Table 604.5.

604.9 Water Hammer. Water hammer arrestors are required where quick closing valves are utilized. Quick closing valves as defined in chapter 2 include washing machines, dishwashers, and ice makers.

Change Section 605 Materials, Joints, and Connections to read as follows:

605.3 Water service pipe. Water service pipe shall conform to NSF61 and shall conform to one of the standards listed in Table 605.3. All water service pipe or tubing, installed underground and outside of the structure, shall have a minimum working pressure of 200psi (1375kPa) at 73.4°F (23°C). Where the water pressure exceeds 200psi (1375kPa), piping material shall have a minimum rated working pressure equal to the highest available pressure. All ductile iron water pipe shall be cement mortar lined in accordance with AWWA C104.

Table 605.3 Water Service Pipe. Delete: Acrylonitrile butadiene styrene (ABS) plastic pipe and galvanized steel.

Table 605.4 Water Distribution Pipes. Delete: galvanized steel pipe.

Table 605.5 Pipe fittings. Delete: Acrylonitrile butadiene styrene (ABS) plastic pipe and galvanized steel pipe.

Change Section 606 Installation of the Building Water Distribution System to read as follows:

606.2 Location of shutoff valves. Delete 2. On the water supply pipe to each silcock.

606.3 Access to valves. Access shall be provided to all required full-open valves and shut off valves, with a minimum 6 inch (152mm) access.

Change Section 608 Protection of potable water supply to read as follow:

NOTE: This section is for reference only; water supplies are regulated by the Alabama Department of Environmental Management (ADEM).

**Table 608.17.1
DISTANCE FROM SOURCES OF CONTAMINATION TO PRIVATE
WATER SUPPLIES AND PUMP SUCTION LINES**

SOURCE OF CONTAMINATION	DISTANCE (feet)
Barnyard	100
Farm silo	25
Pasture	100
Pump house floor drain of cast iron draining to ground surface	2
Seepage pits	100
Septic tank*	50
Subsurface disposal fields*	100
Subsurface pits	100

For SI: 1 foot = 304.8mm

*May be reduced as allowed by Alabama Department of Public Health Onsite Sewage Disposal Rules 420-3-1

Chapter 7 Sanitary Drainage of the IPC shall be amended as follows:

Change Section 701 General to read as follows:

701.2 Sewer required. Every building in which plumbing fixtures are installed and all premises having drainage piping shall be connected to public sewer where available. When public sewer is not available it shall be connected to an approved private sewage disposal system in accordance with Alabama Department of Public Health rules.

Exception: At time of adoption of this code, existing private sewage systems shall be allowed to remain in use until failure or repairs are necessary. Then connection to public sewer shall be required if it is available, and the lot of record is less than 1 acre in size.

Change Section 702 Materials to read as follows:

702.1 Above ground sanitary drainage and vent pipe. Delete galvanized pipe.

Change Section 704 Drainage Piping Installation to read as follows:

704.2 add 4. A pipe increaser installed on a hub drain.

704.2.1 Change in Size. The minimum pipe size installed underground in a sanitary drainage system within a building shall be 2 inch nominal size.

Change Section 708 Cleanouts to read as follows:

708.1.1.1 Clean out at Kitchen Sink Stack. A clean out is required where the stack serving the kitchen sink is located on an exterior wall, or where the stack is located in a wall that is shared with a garage or storage room outside of the insulated building envelope. The cleanout shall be located above the drain entering the stack, and shall open to the outdoors, garage, or storage room.

708.1.2 Building Sewers. Building sewers shall be provided with cleanouts located not more than 80 feet apart measured from the upstream entrance of the cleanout. (The rest of 708.1.2 as written in code).

708.1.3.1 Building sewer and property service lateral connection. There shall be a clean out located at sewer conjunction of service lateral and building sewer outside of right of way.

Change Section 710 Drainage system sizing to read as follows:

Table 710.1 (1) Building drains and sewers.

Note b The maximum number of water closets on a 3 inch (76.2mm) line shall be 3.

Note c No building sewer shall be less than 3 inch (101.6mm) diameter.

Note d Minimum size of building drain, in a commercial building, shall be a minimum of 4 inch (101.6mm).

Exception: A building sewer less than 10 feet in developed length can be 3 inch diameter if connecting to a septic tank or grinder pump.

Change Section 712 Sumps and Ejectors to read as follows:

712.3.3.1 Materials. Pipe and fitting materials must be made of copper or copper-alloy, CPVC, ductile iron, PE, or PVC schedule 40.

Change Section 714 Backwater Valves to read as follows:

714.1.1 Sewage backflow. Where a plumbing drainage system may be subject to a backflow of sewage including, but not limited to the installation of fixtures below the level of

the nearest upstream manhole cover, suitable provisions shall be made by the contractor or property owner, to prevent effluent from entering or backing up into the building.

Chapter 8 Indirect/Special Waste shall be amended as follows:

Change Section 802 Indirect Wastes to read as follows:

802.3.3 Open hub waste receptors. A hub drain shall be in the form of a hub or a pipe extending not less than 1" (25mm) above the floor. The minimum size of a hub drain opening shall be 4" (102mm).

Chapter 9 Vents of the IPC shall be amended as follows:

Change Section 901 General to read as follows:

901.5 Tests. The vent system shall be tested in accordance with section 312 as amended.

Change Section 903 Vent Terminals to read as follows:

903.1 Roof extension. Open vent pipes that extend through a roof shall be terminated not less than 8" (203mm) above the roof. Where a roof is to be used for assembly or as a promenade, observation deck, sunbathing deck, or similar purposes, open vent pipes shall terminate not less than 7' (2.14 meters) above the deck.

Change Section 916 Island Fixture Venting to read as follows:

916.4 Island vent permitted. A combination waste and vent is allowed for an island kitchen sink provided the vertical and horizontal drain is a minimum of 3" (76 mm) in diameter, the horizontal drain is within 15' (9.7 m) of a vent or vented branch, and a clean out is provided.

Change Section 918 Air Admittance Valves to read as follows:

918.1.1 Connection. Air admittance valves may be used only with prior approval of the Code Official.

Chapter 10 of the IPC shall be amended as follows:

Change Section 1002 Trap Requirements to read as follows:

1002.6 Building Traps. Building (house) traps are not allowed without prior permission of the Code Official.

Change Section 1003 Interceptors and Separators to read as follows:

1003.1.1 Additional locations. An interceptor is required for all sinks located in commercial kitchens, including warming kitchens, that are for other than employee only (see note 2 for sizing).

1003.3.5 Grease Interceptors. Grease interceptors shall conform to PDI G101.

1003.3.5.1 Grease Interceptor capacity. Grease interceptors shall have the grease retention capacity indicated in Table 1003.3.5.1 for flow-through rates indicated. The minimum requirement shall be a 200-pound interceptor, unless designed by a licensed design professional.

1003.3.6.1 Grease Interceptor Capacity. Grease trap (GT) size or grease interceptor (GI) capacity shall be determined by using the following formula and table:

Note: Multiply total gallons required by this formula x5 to achieve pounds of grease

retention for passive interceptors.

$$D \times MF \times GL \times RT \times ST = \text{GT size (gallons)}$$

Note: add 25 seats for each drive through

CODE	EXPLANATION
D	Total number of seats
MF	Meal Factor, based on establishment type and average time per meal 1.33 Fast Food/Cafeteria (45 min) 1.00 Restaurant (60 min) 0.67 Leisure Dining (90 min) 0.50 Dinner Club (120 min)
GL	Gallons of wastewater per meal 6 With dishwashing machine 5 Without dishwashing machine 2 Single service kitchen 1 Food Waste Disposal
RT	Retention time 2.5 Commercial kitchen 1.5 Single service kitchen
ST	Storage factor, based on hours of operation 1.0 Operation of 8 hours 1.5 Operation of 12 hours 2.0 Operation of 16 hours 2.5 Operation of 24 hours 1.5 Single service kitchen

- Notes: 1. Minimum grease interceptor size, if connected to a septic tank system shall be in accordance with ADPH Onsite Sewage Disposal Rules Chapter 420-3-1.
2. Minimum grease interceptor size for commercial kitchens, if connected to public sewer, shall be 1000 gallons, unless designed by a licensed design professional, Minimum grease interceptor size for all commercial buildings with other than employee only kitchens shall be 12 pounds or 6 GPM flow through rating.
3. The construction plans submitted with the permit application shall show the capacity of the grease interceptor and the above grease interceptor capacity formula with all formula code values identified.

1003.3.6.2 Baffling Requirements for unmarked (no ASTM#) grease interceptors.

All grease interceptors shall have a minimum of two (2) baffles. The nearest baffle from entry point of effluent shall allow flow under the baffle wall. The second baffle will allow flow over the top of baffle wall. Inlet tees shall have a drop pipe a min. of 12 inches long. Exit fittings (tees) shall have a drop pipe that extends to within 12 inches of bottom of tank. Suitable room for rodding must be allowed at top of each tee. All grease interceptors shall be accessible for pumping and cleaning with access covers at each end of trap.

1003.3.6.3 Grease Interceptor Installations. All grease interceptors shall be installed

as per manufacturer's recommendations. This includes wall sizing for high traffic areas and location.

1003.3.9 Grease interceptor Sampling Port. A clean out shall be installed immediately downstream of the grease interceptor for the purpose of acquiring grease interceptor effluent samples.

1003.4 Oil separators required. At repair garages, gasoline stations with grease racks, grease pits or work racks, car washing facilities with engine or undercarriage cleaning capabilities, factories where oily and flammable liquid wastes are produced, and hydraulic elevator pits, oil separators shall be installed into which all oil-bearing, grease-bearing, or flammable wastes including waste from service and hand washing sinks located in the work area, shall be discharged before emptying into the building drainage system or other point of disposal.

Chapter 11 Storm Drainage. Adopted for reference purposes only.

1101.1 Scope. The provisions of this chapter shall govern the materials, design, construction and installation of storm drainage within the building to a point 3' (914mm) beyond the perimeter of the building. Beyond that point ADEM rules and regulations apply.

Chapter 12 Special Piping and Storage Systems. Adopted for reference purposes only.

Chapter 13 Nonpotable Water Systems shall be amended as follows:

Change Section 1301 General to read as follows:

1301.1.1 Approval. Chapter 13 may only be used with prior approval of the Building Official.

Chapter 14 Subsurface Landscape Irrigation Systems shall be amended as follows:

Change Section 1401 Subsurface Landscape Irrigation Systems to read as follows:

1401.1.1 Approval. Gray water subsurface landscape irrigation systems shall be approved by the State of Alabama Onsite Sewage Treatment and Disposal Rules and Regulations as enforced by the Mobile County Health Department.

I. SEPARATION CLAUSE: If any section, subsection, sentence, clause, or phrase of this Code is for any reason held to be unconstitutional, such decision shall not affect the validity of the remaining portions of this code. The Mobile County Commission hereby declares that it would have passed this code and each section, subsection, clause, or phrase thereof, irrespective of the fact that anyone or more sections, subsections, sentences, or phrases be declared unconstitutional.

Exhibit B

The individual or firm selected shall obtain at its own expense, and maintain in full force and effect during the term of any contract resulting from this RFP, a policy or policies of insurance, issued by an insurance company or companies licensed to conduct business in the State of Alabama and having a minimum A.M. Best rating of "A-VII", providing the following coverages and containing coverage limits not less than the following:

- a. Commercial General Liability (public liability including premises, products and completed operations)

Bodily injury and property damage combined:

\$1,000,000 per occurrence
\$1,000,000 aggregate

Such policy shall name the Mobile County Commission, its officers and employees, as additional insured.

- b. Automobile Liability (including owned, non-owned and hired vehicles)

Bodily injury and property damage combined:

\$1,000,000 per accident

- c. Workers' Compensation and Employers Liability

Part One: Benefits as required by Alabama law

Part Two: \$1,000,000 per accident
\$1,000,000 each employee
\$1,000,000 policy limit

All such policies shall contain an endorsement requiring the insurer to provide thirty (30) days' notice to the County prior to the cancellation thereof.

The individual or firm selected shall provide the County a certificate of insurance prior to commencement of the work.